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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,911	07/28/2003	Colin Chee Chong Hin	70010991-1	8101

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AGILENT TECHNOLOGIES, INC.
Intellectual Property Administration
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EXAMINER

NGUYEN, THINH H

ART UNIT PAPER NUMBER

2861

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/628,911	Applicant(s) CHONG HIN, COLIN CHEE	
	Examiner Thinh H. Nguyen	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,6,7,10-17 and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-17 and 19-24 is/are allowed.
- 6) ☒ Claim(s) 1,3,6-7,10-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 5, 2005 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 3, 6, 10 and 11 are rejected under 35 U.S.C. 102(a) as being anticipated by Kawase et al. GB 2 379 414 A.

Kawase et al. discloses, regarding claim 1, a system for printing (figure 5, noted while Kawase et al. teaches the application of an inkjet printhead in the formation of a flexible display using the deposition of polymeric materials this is still well within the generic definition of "printing" and, in any case, recited intended use in the preamble does not limit apparatus claims over prior art structure when the prior art structure is

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clearly capable of performing the intended use, see MPEP 21 1 1.02), the system comprising:

an optical sensor (16) that is movable (the CCD sensor 16 is movable via gantry 4 as explained in page 19, lines 10-12 and page 20, lines 25-29) relative to a print medium (flexible substrate 30 printed on by print heads 20); and

a print medium feed mechanism (10) comprising a roller (print drum) wherein a mark (11) is located on the roller (figure 5, page 20, lines 25-29) and visible to the optical sensor (16) within the range of movement of the optical sensor, the mark providing a known location that can be used to establish a position of the optical sensor (figure 5, page 22, lines 3-5), wherein a first position of said optical sensor established according to said mark (11) is capable of being used for determining an error associated with a second position determined using information from said print medium sensed as said optical sensor moves relative to the print medium (page 21, lines 10-17, also MPEP' 21 14 is emphasized, functional language, i.e. "capable of", does not distinguish apparatus claims from the prior art when the prior art is able to perform such function). In the context of said marks separated by known distances measured in a first direction along said circumference and known distances measured in a second direction along said length, wherein said known distances measured in said first direction and in said second direction are used to determine a position of said optical sensor relative to said print medium, it is understood that all marks relative to both directions are separated by known distance (coordination with respect to a relative axis, point, and also respect to one another so that a specific position can be coordinated. It is noted that these even

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space marks are divided to manufacture scale (known intervals) so that an exact position of the nozzle/pixel can be pickup/location by the encoder.)

Regarding claim 3, the mark (11) along the length the roller (10) is visible to the optical sensor (16) during transport of the opaque print medium (30) (page 20, lines 25-29). (in the context of white paper)

Regarding claim 6, a second optical sensor (further CCD camera 16) is taught to be positioned so as to sense information from the print medium (30) (page 22, lines 6-8).

Regarding claim 10, MPEP 2114 is again emphasized. The apparatus of Kawase et al. is capable of performing the function of determining a rotational mounting error because both the sensor and alignment marks on the print media are provided.

Regarding claim 11, an inkjet printhead capable of ejecting ink is coupled to the sensor (see title, figure 5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawase et al. GB 2 379 414 in view of Marinoff US 4,207,578.

Kawase et al. discloses the limitations of claim 1 as explained in the 35 USC 102 rejection above with the marks (11) formed on a first roller (10) of a feed mechanism.

Kawase et al. uses a vacuum drum and inkjet printheads in the disclosed system (abstract) indicating that teachings relevant to inkjet printing and vacuum drums used in inkjet printing are relevant.

Kawase et al. fails to disclose a second roller.

Marinoff discloses a vacuum roller (12) for inkjet devices conveyed over a drum by worm (20) (analogous to the gantry system of Kawase et al.) and second and third rollers (36, 37) used with the vacuum roller to form a feed mechanism for a print medium (figure 1, column 4, lines 4-8).

It would have been obvious for a person of ordinary skill in the inkjet art at the time of the invention to utilize the print media feed mechanism of Marinoff as the feed mechanism of Kawase et al. The motivation for doing so would have been to enable feeding of the print media to the vacuum roller from a supply stack of print media as taught by Marinoff.

Allowable Subject Matter

6. Claims 12-17, 19-24 are allowable for reasons of record (see office action of November 9, 2004).

Patent Application Information Retrieval (PAIR)

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Contact Information

8. Any inquiry concerning this communication should be directed to examiner Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be reached Mon-Wed, and Thurs from 9:00A – 5:00P. The official fax phone number for the organization is (571) 273-8300. The examiner supervisor, Dave Talbott, can also be reached at (571) 272-1934.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.



Thinh Nguyen
September 13, 2005

Thinh Nguyen
Primary Examiner
Technology Center 2800